powerbass®
AutoSound

ASC 1.2
ASC 2.4

AUTOSOUND DIGITAL STIFFENING CAPACITOR

User's Manual

Please read through this manual to familiarize yourself with your new capacitor. Should your PowerBass AutoSound Capacitor ever require service, you will need to have the original dated receipt.

Thank you and Congratulations

Thank you for your decision to purchase a PowerBass USA Stiffening Capacitor, commonly called a Power Cap. Capacitors are nearly indestructible and will provide years of service if installed and used in accordance with the instructions in this manual. PowerBass capacitors are energy storing devices capable of delivering large amounts of power on demand and they recharge more rapidly than a battery. Fitted with a highly visible digital top you can easily monitor your systems operating voltage.

DIGITAL STIFFENING CAPACITOR

This installation manual contains valuable information on how to get the most out of your new PowerBass ACP Stiffening Capacitor. Virtually any car stereo system will benefit from the addition of this unique and versatile product.

To learn more about PowerBass Autosound, please visit us on the World Wide Web at
http://www.powerbassusa.com

Δ WARNING Δ

This stiffening capacitor may explode and cause serious injury if abused or connected improperly. Please refer to the instructions contained in this manual for correct mounting, charging/discharging and wiring for this Capacitor prior to installation.

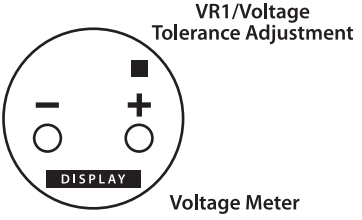
FEATURES

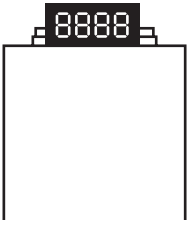
Supercharged Electrolyte Fluid: 16 volt (20 volt peak) electrolyte fluid provides a quicker response/ recharge time– POWER ON DEMAND!

Low E.S.R./Equivalent Series Resistance: Advanced manufacturing techniques give PowerBass capacitors the ability to discharge current very quickly based on resistance (the lower the E.S.R. the better). Our caps can deliver to up to 10,000 amps instantly!

Through Post Platinum Connectors: The digital monitor is wired "through the post" in parallel with the capacitor. This avoids adding any resistance which can reduce the current making the capacitor much less effective.

Digital Voltage Meter: When the system is turned on, the 4-digit red display will show DC at the capacitor voltage down to 0.01 V





CAUTION

To prevent injury and damage to the unit, please read and follow the instructions in this manual. If you feel unsure about installing this system yourself, have it installed by an Authorized PowerBass dealer or technician. Before attempting installation always disconnect the negative (-) battery terminal.

POWER WIRING CONSIDERATIONS

Installation of your PowerBass capacitor is simple and straightforward. When installing the capacitor, we recommend using the same gauge wire as that of the power connection to the amplifier. Ground the capacitor to the nearest chassis ground using the same gauge wire as that used for the power connection.

It is strongly recommended the capacitor be fused (not included) at the battery. The fuse value should be the same as that of the power fuse used for the amplifier. This fuse should be installed no more then 18-inches (0.5m) from the battery.

INSTALLATION AND MOUNTING

The capacitor should be mounted as close to the amplifier as possible (18-inches or less). Keep the wire runs as short as possible to reduce voltage loss and provide your PowerBass capacitor with as much power as possible.

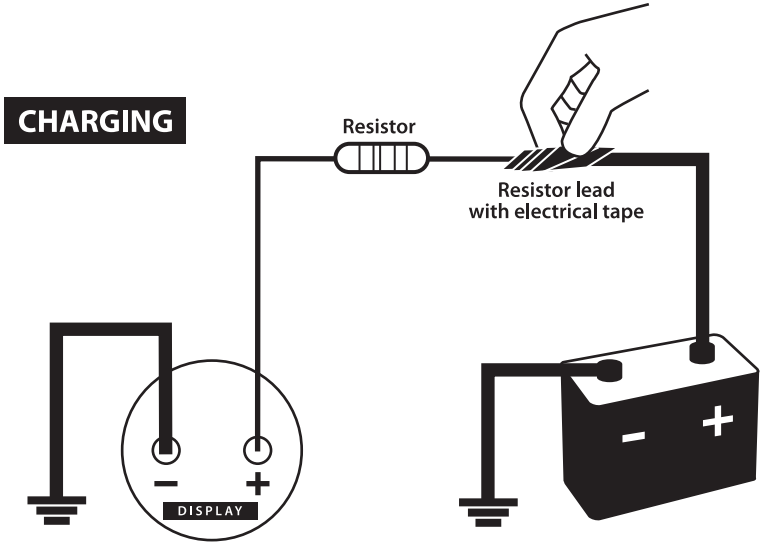
Use the mounting brackets supplied to secure the capacitor. The brackets will need to be attached to the capacitor before you attempt to install it.

Use caution to install the capacitor in a dry safe place where it will not be exposed to water, oil or heat. The capacitor may be mounted in any position; however, care should be taken to ensure the venting hole on top is unobstructed at all times. Be sure the digital display will be visible in the location you choose.

CHARGING THE CAPACITOR

NOTE: CAPACITORS ARE SHIPPED WITH NO ELECTRICAL CHARGE AND MUST BE CHARGED BEFORE USE.

A charging resistor (supplied) is required to properly charge the capacitor. The capacitor MUST be charged BEFORE connecting it to the electrical system. Take care not to over-tighten screws on the capacitor input/output terminals! **Stripped or broken terminals are NOT covered by the warranty.**



Charge the capacitor as follows **(NOTE: it is extremely important to follow the steps below to eliminate the possibility of damaging the capacitor, car battery and/or audio devices being powered)**

1. Connect the ground cable from the capacitor's NEGATIVE (-) terminal to a chassis ground.

2. Temporarily place the supplied charging resistor between the POSITIVE (+) terminal of the capacitor and the Power cable from battery's POSITIVE (+) terminal using electrical tape. Do this for 30 seconds.

3. Immediately after the charging process, remove the resistor and electrical tape from the circuit and permanently connect the positive cable of the battery to the POSITIVE (+) terminal on the capacitor.

To verify the charging process is complete, using a Volt-Ohm Meter (VOM) measure the voltage across the battery and capacitor. The voltage reading should be the same on both.

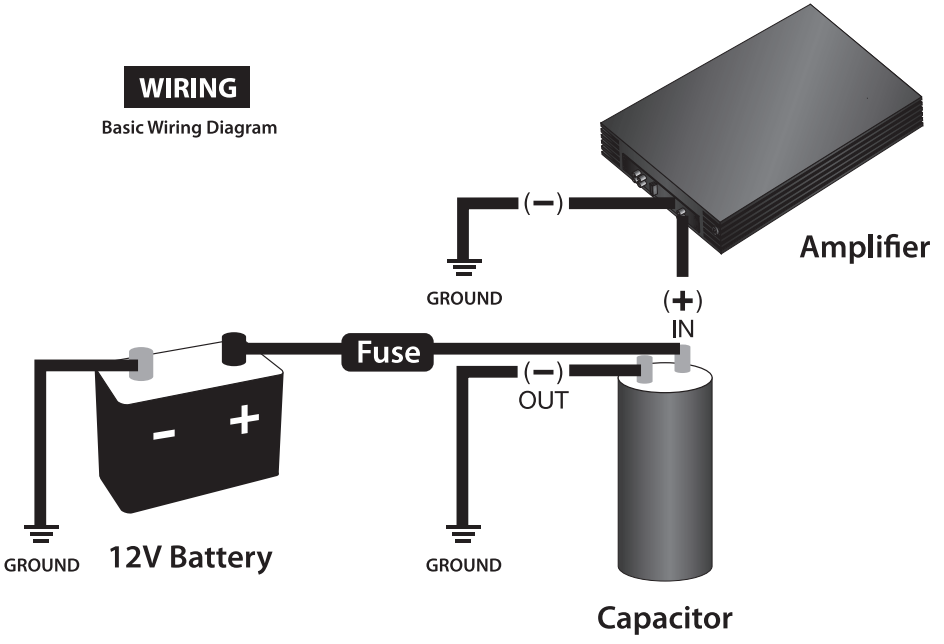
CAUTION: The resistor and resistor wires will become hot!

WIRING

For all wiring connections, use cable of the same or heavier guage than those of which are used for the amplifier. Always use the largest guage Power/Ground cable possible--remember, bigger wire is better!

Keep the positive power wire as short as possible and connect it directly to amplifier's positive input (+). Kepping the wire runs short will minimize voltage losses in the cables. The ground cable for the capacitor should also be as short as possible and connected directly to a good clean bare metal chassis ground point.

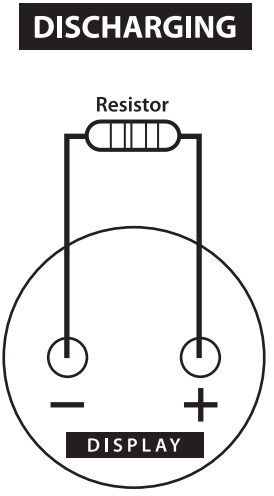
It is strongly recommended the capacitor be fused at the battery--no further than 18-inches (0.5m).



DO NOT ground the capacitor directly to the amplifier ground terminal or ground cable.

DISCHARGING THE CAPACITOR

Should you want to remove the capacitor from the system you will need to discharge (release) the power stored in the capacitor. With the battery power disconnected, place the resistor across the capacitor's POSTIVE (+) and NEGATIVE (-) terminals as shown:



CAUTION: The charging resisitor and resistor wires will become hot!

Wait about 30 seconds for the capacitor to become discharged. Then it will be safe to remove the capacitor from the circuit.

To verify the capacitor has been discharged, check with a Volt-Ohm Meter (VOM) and measure the voltage across the capacitor. If the voltage is at a nominal level (less then 1 volt), it is safe to remove the capacitor from the vehicle.

NOTE: Keep the charging resistor in a safe place. In case of lost or damaged charging resistor, you may use a 47-ohm 2 watt resistor as a replacement. This resistor can be found at most electronics supply or parts stores.

SPECIFICATIONS

Model No.: ASC-1.2

Capacitance---------- 1,200,000 microFarad (1.2 Farad)
Working Voltage---------- 16 DC
Surge Voltage---------- 20 DC
E.S.R. (Equivalent Series Resistance)--------- 0.0015 ohm @120hz/ 25°C
Capacitance Tolerance---------- ± 10%
Dimensions (H) x (D)---------- 9.69" (246mm) x 3.0" (76mm)

Model No.: ASC-2.4

Capacitance---------- 2,400,000 microFarad (2.4 Farad)
Working Voltage---------- 16 DC
Surge Voltage---------- ----- 20 DC
E.S.R. (Equivalent Series Resistance)--------- 0.0015 ohm @120hz/ 25°C
Capacitance Tolerance---------- ± 10%
Dimensions (H) x (D)---------- 10.25" (261mm) x 3.5" (89mm)

NOTE: Height is measured from the top post to the base.

POWERBASS AUTOSOUND LIMITED WARRANTY POLICY

PowerBass USA, Inc. offers limited warranty on PowerBass products under normal use on the following terms:

PowerBass Autosound Electronics are to be free of defects in material and workmanship for a period of one (1) year.

This warranty applies only to PowerBass products sold to consumers by Authorized PowerBass Dealers in the United States of America. Products purchased by consumers from a PowerBass dealer in another country are covered only by that country's Distributor and not by PowerBass USA.

This warranty covers only the original purchaser of PowerBass product. In order to receive service, the purchaser must provide PowerBass with the receipt stating the consumer name, dealer, product and date of purchase.

Products found to be defective during the warranty period will be repaired or replaced (with a product deemed to be equivalent) at PowerBass's discretion and will not be liable for incidental or consequential damages. PowerBass will not warranty this product under the following situations:

- **Electronics received with apparent rust or corrosion**
- **Any evidence of liquid damage or exposure to excessive heat**
- **Attempted repairs or alterations of any nature**
- **Product that has not been installed according to this owners manual**

Any implied warranties including warranties of fitness for use and merchantability are limited in duration to the period of the express warranty set forth above. Some states do not allow limitations on the length of an implied warranty, so this limitation may not apply. No person is authorized to assume for PowerBass any other liability in connection with the sale of this product.

Please call (909) 993-5399 for PowerBass Customer Service. You must obtain an RA# (Return Authorization Number) to return any product to PowerBass. **The RA number must be prominently marked on the outside of the shipping carton or the delivery will be refused.** Please pack your return carefully; we are not responsible for items damaged in shipping. Return the defective product along with a copy of the original dated retail sales receipt, plus $12.00 for handling and diagnostic evaluation to:

PowerBass USA, Inc.,
Attn: Returns (RA#_____)
13936 Mountain Avenue, Chino, CA 91710

Residents of HI, AK and US territories will be charged for return shipping. All inquires regarding service and warranty should be sent to the above address.

Removed or altered serial numbers will void this warranty

Due to constant improvement, specifications are subject to change without notice.

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